

REMARKS

Claims 1-3 have been cancelled and claims 4-7 are all the claims presently pending in the application. By this Amendment, claims 4-7 have been amended. No new matter has been introduced by this Amendment. Accordingly, entry and consideration of the Amendment are respectfully requested.

I. Informal Matters

The Examiner has found the drawings filed on August 20, 2001, acceptable. Additionally, the Applicants note that the Examiner has acknowledged the claim for foreign priority and the receipt of all certified priority documents.

II. Claim Rejections

In the Office Action, claims 4 and 5 stand rejected under 35 U.S.C. 102(e) as being anticipated by Thompson (U.S. Patent No. 6,249,510, hereafter "Thompson"). Additionally, claims 6 and 7 stand rejected under 35 U.S.C. 102(e) as being anticipated by Liu et al. (U.S. Patent No. 5,953,141, hereafter "Liu"). To expedite prosecution, the Applicants have herein amended claims 4-7 to clearly distinguish the present invention from Thompson and Liu. Specifically, the claims have been amended to more particularly point out the positioning of the add and drop modules for the working and protection functions.

A. Thompson Reference

The present invention, as recited in independent claim 4, is directed to a network node having optical add and drop modules, wherein the add module and the drop module for a working connection are positioned on a working module (OADRM-R2, Fig 2, working), and the add module and the drop module for protection are positioned on a protection module (OADRM-R1, Fig 2, protection). In other words, the add and drop modules for working and protection functions are positioned on separate boards.

Thompson is directed to a signal protection system for a bidirectional ring network. In the Office Action (page 2), the Examiner relies on Fig. 2 for disclosing each and every element as recited in the claims. Thompson, in Fig. 2, discloses a channel switch 50-1 that includes two 1:3 input switches 30-1, 30-2 and two 3:1 output switches 35-1, 35-2 for receiving and dropping a bidirectional signal. The selection between working and protection connections is performed by the switches. The Examiner specifically relies on the two 1:3 input switches 30-1, 30-2 and two

3:1 output switches 35-1, 35-2 for anticipating the drop and add modules of the present invention. However, after a detailed review of Figure 2 of Thompson, it is clear that the two 1:3 input switches 30-1, 30-2 and two 3:1 output switches 35-1, 35-2 (i.e., add and drop modules) are positioned on the same board (i.e., channel switch 50-1), not on separate boards as in the present invention. Accordingly, independent claim 4 is distinguishable over Thompson. Likewise, dependent claim 5 is distinguishable over Thompson based on its dependency from claim 4.

Dependent claim 5 is also believed to be distinguishable over Thompson on its own merit for the following reasons. In the Office Action (page 2), the Examiner relies on Fig. 2 of Thompson for teaching each and every element recited in claim 5. However, Thompson in Fig. 2 fails to disclose that each drop module has its own line input and line output, and that each add module has its own line input and line output. Instead, Thompson shows a drop module and an add module connected in series. There is no separate line output of the drop module and no separate line input of the add module, as recited in claim 5. According, claim 5 is distinguishable over Thompson on its own merit.

B. Liu Reference

The present invention, are recited in independent claim 6 (similar to claim 4), is directed to a network node having optical add and drop modules, wherein the add module and the drop module for the working connection are positioned on a working module (OADRM-R2, Fig 2, working) and the add module and the drop module for protection are positioned on a protection module (OADRMR1, Fig 2, protection).

Liu is directed to a method and apparatus for constructing an optical wavelength-routing network in which each network node is a dynamic add-drop multiplexer. More specifically, Fig. 11 discloses a two fiber unidirectional ring system with add-drop modules (1111-1114) on OADM 1110. In the office Action (pages 3-4), the Examiner relies on the add-drop modules (1111-1114) on OADM in Fig. 11 for disclosing each and every element as recited in claim 6. However, Liu appears to suffer from the same deficiencies noted above in Thompson in that all the add-drop modules are positioned on the same module (i.e., OADM). According, independent claim 6 is distinguishable over Liu at least for this reason. Likewise, dependent claim 7 is distinguishable over Liu based on its dependency from claim 6.

Claim 7 is distinguishable over Liu on its own merit for the following reasons. Liu fails to disclose drop and add modules that are connected in series. Additionally, there is no separate line output of the drop module and no separate input of the add module, as specifically recited in claim 7. According, claim 7 is distinguishable over Thompson on its own merit.

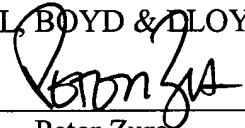
III. Conclusion

Based on the foregoing, the Applicants respectfully request withdrawal of the claim rejections and allowance of the application. If there are any additionally fees that are due in connection with this application as a whole, the Examiner is authorized to deduct those fees from Deposit Account No. 02-1818. If such a deduction is made, please indicate Attorney Docket No. 0112740-261 on the account statement.

Respectfully submitted,

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Dated: November 10, 2005